January 24, 1996

For Action Presidents' Committee Request for Program Initiation Funds

Converting Former Russian Biological Weapons Personnel and Facilities to Work on International Public Health Working Group on Biological Weapons Control, Committee on International Security and Arms Control (CISAC), OIA Board on International Health, IOM

SUMMARY: The personnel who were engaged in the Soviet/Russian biological weapons (BW) research program represent a potential resource for responding to problems of global public health. Assistance for BW conversion is politically sensitive, however, because of suspicions that the Russians have not ceased all their BW work; the entire Nunn-Lugar assistance program for Russia is currently at risk because of these accusations. Yet involving these scientists and facilities in continuing collaborative projects with the West as part of the global effort for research, surveillance, and monitoring on new, emerging, and re-emerging diseases is one of the best ways to increase our confidence that the Russians have stopped offensive BW research. The U.S. government has made grants through the International Science and Technology Center (ISTC) in Moscow to former BW facilities. ISTC is seeking the cooperation of other federal agencies and other Western governments engaged in biomedical collaboration with Russia to provide further assistance. This cooperation offers the possibility of significantly leveraging the resources available for assistance to Russia and for international health. Senior U.S. officials, in particular from the Defense Department and the ISTC, have expressed interest in having the NRC assist in designing and implementing a cooperative program that can meet both scientific and political standards.

Program Initiation Funds in the amount of \$23,500 are requested to hold a planning meeting to assess the potential role of the NRC in addressing these problems. The Working Group on Biological Weapons Control of the Committee on International Security and Arms Control (CISAC) and the Board on International Health (BIH) would form a small steering committee composed of members of the two bodies to organize the meeting.

BACKGROUND: In 1992 Russian President Yeltsin admitted that, in violation of the 1972 Biological Weapons Convention (BWC), the Soviet and later the Russian government had maintained a secret offensive BW research program. President Yeltsin declared that all offensive BW work had ceased, and that these facilities would be converted to peaceful purposes. Under current conditions, the conversion requires Western assistance.

The effort to convert military R&D projects to peaceful use depends principally on finding commercially viable alternatives to their current lines of research and development. Past Soviet/Russian BW research focused on diseases such as tularemia, anthrax, and plague in which there is limited commercial interest to date. Many of these diseases are non-epidemic by nature and occur only sporadically in limited populations. Thus, research on the prevention and control of these diseases has been almost exclusively within the purview of government agencies. It can be expected that private industry in the U.S. and Europe would little interest in joint ventures and collaborative agreements with Russian military institutes working on these infections.

However, the deficiencies in the world's current capabilities to meet the threats posed by more widespread emerging and re-emerging infectious diseases--for example, malaria, tuberculosis, HIV/AIDS--have been repeatedly emphasized. The Institute of Medicine, in particular the Board on International Health, has played an important role in alerting the world to these dangers. Refocusing the expertise of the former BW scientists on new, cooperative activities to promote comprehensive global surveillance and monitoring and effective prevention and control of these growing microbial threats offers substantial potential benefits for both public health and arms There is also the potential for attracting private sector investment and activity in these networks which could serve to leverage existing public sector funding productively and efficiently. In addition, establishing a continuing Western presence in these facilities would offer reassurance to the world that the conversion to peaceful work continues, and promote linkages between Russian scientists and international health research networks.

Examples of some of the existing diseases that might be subjects for cooperative work include hantavirus and broader classes of hemorrhagic fevers; tick-borne encephalitis; brucellosis; malaria; tuberculosis; and HIV/AIDS. Potential emerging disease threats include the ebola virus. Beyond this, support would allow for cooperative and re-directed research into high-profile diseases, such as anthrax, plague, and tularemia, that have been traditionally associated with BW research. The specific kinds of research involved could include work on: (1) surveillance and monitoring methods; (2) studies of pathogenesis, transmission, and prevention; (3) diagnostic tests; (4) treatments; and (5) new vaccines.

The U.S. government has made grants through the International Science and Technology Center (ISTC) in Moscow to former BW facilities. For example, the Centers for Disease Control and NPO Vector, the BW research institute near Novosibirsk that specialized in viruses, have a proposal for joint research on ebola. To date, however, these grants are relatively small and are not being made with a strategic plan to increase their impact and effectiveness. The ISTC is now seeking the cooperation of other federal agencies and other Western governments engaged in biomedical collaboration with Russia to

provide further assistance. The initial response has been positive, both in the U.S. and abroad.

Collaborative efforts also carry political risks, however. Defensive BW research is permitted by the BWC, and the fundamentally dual-use character of the knowledge and facilities makes it difficult to verify the nature of the research being conducted. Accusations that Russian offensive BW work continues have persisted and have now put all assistance for the conversion of former Soviet defense facilities and personnel -- the Nunn-Lugar program -- at risk.

CISAC's Working Group on Biological Weapons Control argues that, in order to be confident that the Russian government has successfully terminated the offensive BW program, the United States will have to establish systematic collaboration with the organizations and individuals that were directly involved in the Soviet/Russian BW research. A number of senior U.S. officials agree, and the Defense Department and the ISTC have expressed interest in having the NRC assist in the design and implementation of such a cooperative program. The knowledge and resources of the Board on International Health would be invaluable in the development of such a project. Moreover, this collaboration offers the possibility of significantly leveraging the resources available for assistance to Russia--for example, to rebuild its public health infrastructure--and for global health more broadly, including other efforts by the BIH.

PROPOSED PLAN OF ACTION: A planning meeting would be organized by a small steering committee composed of experts from the Board on International Health and CISAC's Working Group on Biological Weapons Control. The meeting would assess the potential for a major cooperative program of research and other activities to support the conversion of former Soviet/Russian BW research facilities to global public health research, monitoring/surveillance, and response.

The planning meeting would address a number of questions, including:

- 1) What knowledge is available and what more is needed about former BW programs, facilities, and personnel in Russia to assess potential cooperative programs? How is that information best developed?
- 2) What is the best focus for a cooperative program: (a) on building research networks to work on specific diseases: (b) on developing an array of programs to demonstrate the potential of particular facilities or personnel; or (c) on a research strategy that would engage the facilities and personnel of greatest interest and concern in a network of collaboration with the West? Knowledge of current global

programs directed towards microbiologic threats of interest will provide useful background to answer these questions.

- 3) What are the best strategies to integrate a program of bilateral cooperation and research into the broader context of global surveillance, prevention, and reaction to new, emerging, and re-emerging diseases? Which international institutions should be involved in this planning and at what stage?
- 4) What are the most promising sources of sustained funding for these activities? How can mechanisms for sustained funding be developed? How can resources devoted to assisting BW conversion in Russia be best used to leverage resources for international health research and action and vice versa?

Participants in the meeting would include representatives of relevant U.S. government agencies, both defense/foreign affairs and health; representatives from other Western and international public health agencies; selected representatives from relevant industries in the U.S. and abroad; scientists who could offer advice on ways of engaging universities and research institutes in the U.S. and Europe; and scientists from both former Russian BW facilities and the regular Russian biomedical research community.

ANTICIPATED RESULTS: The steering committee would prepare a report recommending further steps, if any, to be taken by the CISAC and BIH in developing a plan for international cooperation in the pursuit of Russian BW conversion. If further steps are proposed, the report would serve as the basis for a prospectus to be used in seeking funding.

REQUESTED ACTION BY THE PRESIDENTS' COMMITTEE: Allocation of Program Initiation Funds in the amount of \$23,500.

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